



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,606	07/18/2005	Hiroyuki Otake	SON-2926	7314
23353 7590 06/04/2009 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036				
EXAMINER				
MARIAM, DANIEL G				
ART UNIT		PAPER NUMBER		
2624				
MAIL DATE		DELIVERY MODE		
06/04/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/542,606

**Applicant(s)**

OTAKE, HIROYUKI

**Examiner**

DANIEL G. MARIAM

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/18/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)  
Paper No(s)/Mail Date 7/18/05 6/17/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. Claim 8 is objected to because of the following informalities: the limitation “in the case of judged” recited in lines 9-10 appears to be grammatically incorrect. Additionally, the limitation “either of claims 1 to 2” recited in claim 5 should be changed to “any of claims 1 to 4”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the parameters or numbers (N, M) without describing what range of numbers included or excluded by these parameters. Additionally, claim 1 defines a plurality comparison means in line 4, and a comparison unit in line 18. Does this mean the comparison unit has no relation with the plurality of comparison means? Please clarify.

Since claims 2-6 and 11-13 directly or indirectly depend on claim 1, they are also rejected under 35 U.S.C. 112, second paragraph, for the same reason set forth above for claim 1.

***Examiner's Note***

4. Examiner has cited particular columns and line numbers or figures in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the

individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshizawa, et al. (6,070,223).

With regard to claim 7, Yoshizawa, et al. discloses a pattern detection circuit comprising: detection pattern storage means, i.e., memories 11\_1 . . . 11\_n where bit patterns are stored, holding an entry pattern to be a detection target; flag storage means, i.e., hit flag registers 16\_1 . . . 16\_n, storing a flag signal corresponding to each of the entry pattern; comparison means comparing inputted data, i.e., bit pattern of retrieval data, with an entry pattern stored in the detection pattern storage means, and detection position storage means storing the detection position, i.e., address, in response to a flag signal corresponding to the entry pattern stored in the flag storage means when the input data and the entry pattern agree, i.e., match, as a result of a comparison of the comparison means (See for example, col. 1, line 20 – col. 2, line 48).

7. Claims 1, 3-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dwork (6,094,443).

With regard to claim 1, as best understood, Dwork discloses a pattern detection apparatus detecting data of predetermined pattern, i.e., prescribed pattern, and saving a position of the detected data among inputted data, i.e., data stream or received data packet, comprising: a plurality of comparison means (122-1 to 122-N), i.e., comparators 82<sub>i</sub>, corresponding to the number (N) to be detection targets and pattern detection control means (130), and detection position, i.e., field, address, space or location, registration means (140) having a plurality of holding portions corresponding to the number (M) to be detection targets, wherein each of a plurality of the comparison means (122-1 to 122-N) has a detection pattern data holding unit (124) holding data pattern to be a detection target, a flag holding unit (126) holding a flag signal as information defining a pattern detection window (PDW) corresponding to the data pattern to be a detection target (as illustrated in Figs. 3 and 4), and a comparison unit (122) comparing the input data with the data pattern to be a detection target outputted from the detection pattern data holding unit (124) and outputting an agreement signal (HIT) when agreeing, the flag holding unit (126) outputs a held flag (FLG1) to the pattern detection means (130) when the agreement, i.e., match, signal is outputted, the pattern detection control means (130) generates a pattern detection window signal (PDW) based on a flag signal (FLG) outputted from a comparison unit, i.e., comparison result or logic 1, of each of the comparison means (122-1 to 122-N) and outputs it to the detection position registration means (140) when an agreement signal is outputted from either of a plurality of the comparison means (122-1 to 122-N), and the detection position registration

means (140) holds information showing a position of the inputted data in a plurality of the holding portions sequentially (See for example, col. 5, line 26 – col. 7, line 40).

With regard to claim 3, a pattern detection apparatus as set forth in claim 1 or 2, wherein the detection position registration means (140) comprises registers corresponding to the number of patterns of the detection targets (See for example, Figs. 3-4 and the associated text).

With regard to claim 4, a pattern detection apparatus as set forth in claim 1 or 2, wherein the detection position registration means (140) is memory means having a capacity corresponding to the number of patterns of the detection targets (See for example, item 80, in Fig. 5).

With regard to claim 7, claim 1 encompasses the limitation of this claim, and is rejected the same as claim 1. Thus, argument similar to that presented above for claim 1 is applicable to claim 7.

With regard to claim 8, a pattern detection circuit as set forth in claim 1, further comprising: detection position storage control means (which corresponds to state machine or the control within the memory “80”) setting a pattern detection window signal in an active state when the flag signal corresponding to the entry pattern shows to store a detection position, and setting the pattern detection window signal in an inactive state, not enabled, when the flag signal corresponding to the entry pattern shows not to store, i.e., skip/ignore, a detection position in the case of judged that the input data and the entry pattern agree by the comparison means (See for example, Figs. 3-5).

Claim 9 is an analogous variation of claim 8, and is rejected the same as claim 8. Thus, argument similar to that presented above for claim 8 is applicable to claim 9.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-6, 10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dwork (6,094,443) in view of Abe (6,618,491).

With regard to claim 5, Dwork discloses all of the claimed elements, as already discussed above in paragraph 7, and incorporated herein by reference. While Dwork compresses the generic patterns (See for example, col. 5, lines 39-65), he does not expressly call for wherein the input data is moving image data and audio data compressed and coded in accordance with the MPEG standard. However, Abe (See for example, col. 4, lines 37-51) teaches this feature. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching as taught by Abe into the system of Dwork if for no other reason than for compressing and coding the patterns, data stream or video data using the well-known MPEG standard, and to do so would at least allow the production of a better quality image or video data.

Claims 6, 10, and 12-13 are rejected the same as claim 5. Thus, argument similar to that resented above for claim 5 is applicable to claims 6, 10, and 12-13.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 5,867,113 and European Patent Numbers: EP-0-987854A1 and EP-0720380A2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIKKRAM BALI can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL G MARIAM/  
Primary Examiner, Art Unit 2624